IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant:	ROY, et al.	Patent Application	
Application No.:	10/698,815	Group Art Unit:	2151
Filed:	October 30, 2003	Examiner:	Backhean, Tiv

For: MANAGING HANDOFFS OF MEDIA SERVICE SESSIONS AMONG SERVICE PROVIDERS

APPEAL BRIEF

Table of Contents

I. Real Party in Interest

The assignee of the present invention is Hewlett-Packard Development Company, L.P.

II. Related Appeals and Interferences

There are no related appeals or interferences known to the Appellants.

III. Status of Claims

Claims 1-20 are rejected. This Appeal involves Claims 1-20.

IV. Status of Amendments

All proposed amendments have been entered. An amendment subsequent to the Final Action has not been filed.

V. Summary of Claimed Subject Matter-

Independent Claims 1, 10, 19, 29, 38, 42, 44 and 48 of the present application pertain to embodiments associated with managing handoff of media service sessions among service providers.

As recited in Claim 1, "[a] method of managing handoff of media service sessions among service providers in a network" is described. This embodiment is depicted at least in Figures 1 and 7. As shown in Figures 1 and 7, "[a]t Step 710, the service location manager 120 receives information associated with the media service sessions from several sources (e.g., service providers 130A-130D, the client devices 150A-150B, the content provider 110, from the network conditions of the system 100, etc.)" (page 27, lines 25-28). "Further at Step 720, the service location manager 120 uses the information received to determine whether to initiate a handoff of any of the media service sessions from a service provider to another service provider" (page 28, lines 4-6). "Moreover, at Step 730, if the service location manager 120 determines to initiate the handoff, the handoff is initiated between the service providers (e.g., from service provider 130B to service provider 130A)" (page 28, lines 11-13).

As recited in Claim 10, "[a] computer-readable medium comprising computer-executable instructions stored therein for implementing a method of managing handoff of media service sessions among service providers in a network" is described. This embodiment is depicted at least in Figures 1 and 7. As shown in Figures 1 and 7, "[a]t Step 710, the service location manager 120 receives information associated with the media service sessions from several sources (e.g., service providers 130A-130D, the client devices 150A-

150B, the content provider 110, from the network conditions of the system 100, etc.)" (page 27, lines 25-28). "Further at Step 720, the service location manager 120 uses the information received to determine whether to initiate a handoff of any of the media service sessions from a service provider to another service provider" (page 28, lines 4-6). "Moreover, at Step 730, if the service location manager 120 determines to initiate the handoff, the handoff is initiated between the service providers (e.g., from service provider 130B to service provider 130A)" (page 28, lines 11-13).

As recited in Claim 19, a "network system" is described. This embodiment is depicted at least in Figures 5A, 5B and 6. As shown in Figure 5A, "a system 100 for managing handoff of media service sessions among service providers" (page 23, lines 6-7) is shown. System 100 "includes a plurality of service providers 130A-130D, a service location manager 120 (or service manager), a portal 140, and a plurality of client devices 150A-150B" (page 23, lines 14-16). "[T]he service location manager 120 manages the handoff of media service sessions among the service providers 130A-130D. Here, there is a first media service session represented by arrows 7A and 8A, whereas the first media service session includes content provider 110, service provider 130B, and client device 150B" (page 24, lines 8-12). "As depicted in Figure 5B, the service location manager 120 includes an information receiving module 121 for receiving information, whereas the information relates to the media service sessions. Moreover, the service location manager 120 has a handoff determination module 122 for using the information to determine whether to initiate a handoff of any of the media service sessions from a service provider to another service provider" (page 23, line 24, through page 24, line 5). "Figure 6 illustrates a content delivery network 110 that can operate with the system 100 of Figure 5A in accordance with an embodiment of the present

invention. In Figure 6, the content provider is replaced with a content delivery network 110. The content delivery network 110 includes a plurality of content providers 110A-110G distributed within the content delivery network 110" (page 26, lines 24-28).

As recited in Claim 29, "a[n] apparatus for managing handoff of media service sessions among service providers" is described. This embodiment is depicted at least in Figure 5B. "As depicted in Figure 5B, the service location manager 120 includes an information receiving module 121 for receiving information, whereas the information relates to the media service sessions. Moreover, the service location manager 120 has a handoff determination module 122 for using the information to determine whether to initiate a handoff of any of the media service sessions from a service provider to another service provider" (page 23, line 24, through page 24, line 5).

As recited in Claim 38, "[a] method of managing handoff of media service sessions among service providers in a network" is described. This embodiment is depicted at least in Figures 1, 5A and 7. As shown in Figures 1 and 7, "[a]t Step 710, the service location manager 120 receives information associated with the media service sessions from several sources (e.g., service providers 130A-130D, the client devices 150A-150B, the content provider 110, from the network conditions of the system 100, etc.)" (page 27, lines 25-28). "Further at Step 720, the service location manager 120 uses the information received to determine whether to initiate a handoff of any of the media service sessions from a service provider to another service provider" (page 28, lines 4-6). "Moreover, at Step 730, if the service location manager 120 determines to initiate the handoff, the handoff is initiated between the service providers (e.g., from service provider 130B to service provider 130A)"

(page 28, lines 11-13). Moreover, with reference to Figure 5A, "[i]n an embodiment, the media service session uses a streaming technique" (page 23, lines 21-22).

As recited in Claim 42, "[a] computer-readable medium comprising computer-executable instructions stored therein for implementing a method of managing handoff of media service sessions among service providers in a network" is described. This embodiment is depicted at least in Figures 1, 5A and 7. As shown in Figures 1 and 7, "[a]t Step 710, the service location manager 120 receives information associated with the media service sessions from several sources (e.g., service providers 130A-130D, the client devices 150A-150B, the content provider 110, from the network conditions of the system 100, etc.)" (page 27, lines 25-28). "Further at Step 720, the service location manager 120 uses the information received to determine whether to initiate a handoff of any of the media service sessions from a service provider to another service provider" (page 28, lines 4-6). "Moreover, at Step 730, if the service location manager 120 determines to initiate the handoff, the handoff is initiated between the service providers (e.g., from service provider 130B to service provider 130A)" (page 28, lines 11-13). Moreover, with reference to Figure 5A, "[i]n an embodiment, the media service session uses a streaming technique" (page 23, lines 21-22).

As recited in Claim 44, a "network system" is described. This embodiment is depicted at least in Figures 5A, 5B and 6. As shown in Figure 5A, "a system 100 for managing handoff of media service sessions among service providers" (page 23, lines 6-7) is shown. System 100 "includes a plurality of service providers 130A-130D, a service location manager 120 (or service manager), a portal 140, and a plurality of client devices 150A-150B"

(page 23, lines 14-16). "[T]he service location manager 120 manages the handoff of media service sessions among the service providers 130A-130D. Here, there is a first media service session represented by arrows 7A and 8A, whereas the first media service session includes content provider 110, service provider 130B, and client device 150B" (page 24, lines 8-12). Moreover, "[i]n an embodiment, the media service session uses a streaming technique" (page 23, lines 21-22). "As depicted in Figure 5B, the service location manager 120 includes an information receiving module 121 for receiving information, whereas the information relates to the media service sessions. Moreover, the service location manager 120 has a handoff determination module 122 for using the information to determine whether to initiate a handoff of any of the media service sessions from a service provider to another service provider" (page 23, line 24, through page 24, line 5). "Figure 6 illustrates a content delivery network 110 that can operate with the system 100 of Figure 5A in accordance with an embodiment of the present invention. In Figure 6, the content provider is replaced with a content delivery network 110. The content delivery network 110 includes a plurality of content providers 110A-110G distributed within the content delivery network 110" (page 26, lines 24-28).

As recited in Claim 48, "a[n] apparatus for managing handoff of media service sessions among service providers" is described. This embodiment is depicted at least in Figures 5A and 5B. "As depicted in Figure 5B, the service location manager 120 includes an information receiving module 121 for receiving information, whereas the information relates to the media service sessions. Moreover, the service location manager 120 has a handoff determination module 122 for using the information to determine whether to initiate a handoff of any of the media service sessions from a service provider to another service

provider" (page 23, line 24, through page 24, line 5). Moreover, with reference to Figure 5A, "[i]n an embodiment, the media service session uses a streaming technique" (page 23, lines 21-22).

VI. Grounds of Rejection to Be Reviewed on Appeal

1. Claims 1-50 are rejected under 35 U.S.C. §102(e) as being anticipated by United States Patent 6,665,706 by Kenner et al, hereinafter referred to as "Kenner."

VII. Argument

1. Whether Claims 1-50 are anticipated under 35 U.S.C. § 102(e) by Kenner.

According to the Final Office Action mailed December 7, 2007, Claims 1-50 are rejected under 35 U.S.C. §102(e) as being anticipated by Kenner. Appellants have reviewed Kenner and respectfully submit that the embodiments as recited in Claims 1-50 are not anticipated by Kenner for at least the following rationale.

Appellants respectfully submit that independent Claim 1 recites that an embodiment of the present invention is directed to (emphasis added):

> A method of managing handoff of media service sessions among service providers in a network, said method comprising:
> receiving information associated with said media service sessions at a service manager;
> using said information at said service manager to determine whether to initiate a handoff of any of said media service sessions from a service provider to another service provider; and
> if it is determined to initiate said handoff, initiating said handoff.

Independent Claims 10, 19, 29, 38, 42, 44 and 48 include similar recitations. Claims 2-9 that depend from independent Claim 1, Claims 11-18 that depend from independent Claim 10, Claims 20-28 that depend from independent Claim 19, Claims 30-37 that depend from independent Claim 29, Claims 39-41 that depend from independent Claim 38, Claim 43 that depends from independent Claim 42, Claims 45-47 that depend from independent Claim 44, and Claims 49 and 50 that depend from independent Claim 48 also include these recitations.

MPEP §2131 provides:

> "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628,

631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). ... "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim.

Appellants respectfully submit that the rejection of the Claims is improper as the rejection of Claims 1-50 does not satisfy the requirements of a *prima facie* case of anticipation as claim embodiments are not met by Kenner. Appellants respectfully submit that Kenner does not teach or suggest each element of the claimed embodiments in the manner set forth in independent Claims 1, 10, 19, 29, 38, 42, 44 and 48.

First, Appellants respectfully submit that Kenner does not teach, describe or suggest "receiving information associated with said media service sessions at a service manager" (emphasis added) as claimed in independent Claim 1, and similar embodiments of independent Claims 10, 19, 29, 38, 42, 44 and 48. Appellants understand Kenner to disclose a "system and method for the optimized storage and retrieval of video data at distributed sites calls" where "[e]very user is assigned to a specific delivery site based on an analysis of network performance with respect to each of the available delivery sites" (Abstract).

As recited in Kenner, "a delivery site is a 'node' on the network which may store data or other files, such as software code, for delivery. The term can also include a site which is responsible for data delivery, including mirror sites, content providers, and servers for broadcast video streams or Web sites" (col. 7, lines 60-65). Appellants respectfully submit that Kenner does not disclose that a node is for "receiving information associated with said media service session" as claimed. Moreover, Appellants respectfully submit that the delivery of data is not

equivalent to "media service session" as claimed, and thus does not anticipate a "media service session" as claimed.

Moreover, Appellants note that the Office Action mailed December 7, 2007, states that "[t]he [mirror service provider (MSP)] is considered as the service manager" (page 5, line 7). Therefore, Appellants respectfully submit that to support a *prima facie* case of anticipation, Kenner must disclose that the MSP is for "receiving information associated with said media service session at a service manager" (emphasis added) as claimed.

With reference to Figure 1, Appellants note that Kenner discloses the MSP 32 "exercises a management function over the distribution of delivery sites 26, 28, and 30, and over the allocation of requests to the original and delivery sites from user terminals 12, 16, and 20, includes a database capable of transmitting and receiving data over the Internet 10" (col. 7, line 67, through col. 8, line 5). Appellants submit that nowhere does Kenner disclose that the MSP is for "receiving information associated with said media service session at a service manager" (emphasis added) as claimed. In particular, Appellants respectfully submit that exercising "a management function over the distribution of delivery sites" (col. 8, line 1) and "a database capable of transmitting and receiving data" (col. 8, lines 4-5) is not equivalent to "media service session" as claimed, and thus does not anticipate a "media service session" as claimed.

Second, Appellants respectfully submit that Kenner does not teach, describe or suggest "using said information at said service manager to determine whether to initiate a handoff of any of said media service sessions from a service provider to another service provider" (emphasis added) as claimed in independent Claim 1, and similar embodiments of independent

Claims 10, 19, 38, 42 and 44. Appellants note that Claims 19 and 44, in particular, recites "a service manager for managing handoff of media service sessions among said service providers based on information received."

Appellants understand Kenner to teach a system whereby a user terminal determines a best delivery sites or group of sites (col. 12, lines 36-42). With reference to FIG. 1 of Kenner, a network topology including a user terminal 12 and a mirror service provider (MSP) 32 are shown. Kenner recites that a "management function is facilitated by the use of a configuration utility 34 and a client program 36 run within a storage medium (i.e. random access memory) on the user terminal 12" (emphasis added; col. 8, lines 6-9). Moreover, "the configuration utility 34 determines which delivery site, or group of delivery sites, is best for the user terminal 12 (step 50)" (col. 12, lines 38-40).

As noted above, Appellants note in the Response to Arguments in the Final Office Action mailed December 7, 2007, in which it is asserted that "[t]he configuration utility retrieves a delivery site file from the mirror service provider (MSP), initially" (emphasis added; page 4, lines 21-22). Therefore, Appellants maintain that Kenner does not teach, describe or suggest "using said information at said service manager to determine whether to initiate a handoff of any of said media service sessions," because the delivery site file is at the configuration utility. While Appellants understand that the delivery site file originates at the MSP, Appellants understand Kenner to disclose that "the configuration utility 34 determines which delivery site, or group of delivery sites, is best for the user terminal 12 (step 50)" (col. 12, lines 38-40).

Third, Appellants respectfully submit that Kenner does not teach, describe or suggest "using said information at said service manager to determine whether to initiate a handoff of any of said media service sessions from a service provider to another service provider" (emphasis added) as claimed in independent Claim 1, and similar embodiments of independent Claims 10, 19, 29, 38, 42, 44 and 48.

With reference to Figure 1, Kenner illustrates an illustrative network topology including Internet Service Providers (ISPs) 14 and 18, user terminals 12, 16 and 20, content providers 22 and 24, and delivery sites 26, 28 and 32. Moreover, as presented above, Appellants understand Kenner to disclose that "the configuration utility 34 determines which delivery site, or group of delivery sites, is best for the user terminal 12 (step 50)" (emphasis added; col. 12, lines 38-40).

Appellants respectfully submit that a delivery site of Kenner is not equivalent to the claimed "service provider." For instance, Appellants note that Figure 1 of Kenner includes ISPs 14 and 18 and delivery sites 26, 28 and 30. In particular, Appellants respectfully submit that nowhere does Kenner teach, describe or suggest that delivery sites 26, 28 and 30 are service providers. Therefore, Appellants respectfully submit that the delivery site of Kenner does not anticipate the claimed "service provider."

In summary, Appellants respectfully submit that the rejections of the Claims are improper as the rejection of Claims 1-50 does not satisfy the requirements of a *prima facie* case of anticipation as each and every element as set forth in the claim are not found in Kenner.

In view of Kenner not satisfying the requirements of a *prima facie* case of anticipation, Appellants respectfully submit that independent Claims 1, 10, 19, 29, 38, 42, 44 and 48 overcome the rejection under 35 U.S.C. § 102(e), and that these claims are thus in a condition for allowance. Therefore, Appellants respectfully submit that Kenner also does not teach or suggest the additional claimed features as recited in Claims 2-9 that depend from independent Claim 1, Claims 11-18 that depend from independent Claim 10, Claims 20-28 that depend from independent Claim 19, Claims 30-37 that depend from independent Claim 29, Claims 39-41 that depend from independent Claim 38, Claim 43 that depends from independent Claim 42, Claims 45-47 that depend from independent Claim 44, and Claims 49 and 50 that depend from independent Claim 48. Therefore, Appellants respectfully submit that Claims 2-9, 11-18, 20-28, 30-37, 39-41, 43, 45-47, 49 and 50 also overcome the rejection under 35 U.S.C. § 102(e), and are in a condition for allowance as being dependent on an allowable base claim.

Conclusion

Appellants believe that pending Claims 1-50 are not anticipated by Kenner. In summary, Appellants respectfully submit that the rejections of the Claims are improper as the rejection of Claims 1-50 does not satisfy the requirements of a *prima facie* case of anticipation. Accordingly, Appellants respectfully submit that the rejection of Claims 1-50 under 35 U.S.C. §102(e) is improper and should be reversed.

The Appellants wish to encourage the Examiner or a member of the Board of Patent Appeals to telephone the Appellants' undersigned representative if it is felt that a telephone conference could expedite prosecution.

Respectfully submitted,
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Dated: 4/7/2008

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VIII. Appendix - Clean Copy of Claims on Appeal

1. A method of managing handoff of media service sessions among service providers in a network, said method comprising:

receiving information associated with said media service sessions at a service manager;

using said information at said service manager to determine whether to initiate a handoff of any of said media service sessions from a service provider to another service provider; and

if it is determined to initiate said handoff, initiating said handoff.

2. The method as recited in Claim 1 wherein said information includes information received from said service providers and information associated with location and priority of service modules that are involved in any one of said media service sessions.

3. The method as recited in Claim 1 wherein said information includes information received from any client device that is involved in any one of said media service sessions.

4. The method as recited in Claim 1 wherein said information includes information associated with network conditions.

5. The method as recited in Claim 1 wherein said information includes information associated with any content provider that is involved in any one of said media service sessions.

6. The method as recited in Claim 1 wherein said information includes information associated with a content delivery network that is involved in any one of said media service sessions.

7. The method as recited in Claim 1 wherein said determination to initiate said handoff is made before a need for said handoff is absolutely necessary.

8. The method as recited in Claim 1 wherein said determination to initiate said handoff is made based on a pattern associated with said information.

9. The method as recited in Claim 1 wherein said media service sessions include a streaming technique.

10. A computer-readable medium comprising computer-executable instructions stored therein for implementing a method of managing handoff of media service sessions among service providers in a network, said method comprising:

receiving information associated with said media service sessions at a service manager;

using said information at said service manager to determine whether to initiate a handoff of any of said media service sessions from a service provider to another service provider; and

if it is determined to initiate said handoff, initiating said handoff.

11. The computer-readable medium as recited in Claim 10 wherein said information includes information received from said service providers and information associated with location and priority of service modules that are involved in any one of said media service sessions.

12. The computer-readable medium as recited in Claim 10 wherein said information includes information received from any client device that is involved in any one of said media service sessions.

13. The computer-readable medium as recited in Claim 10 wherein said information includes information associated with network conditions.

14. The computer-readable medium as recited in Claim 10 wherein said information includes information associated with any content provider that is involved in any one of said media service sessions.

15. The computer-readable medium as recited in Claim 10 wherein said information includes information associated with a content delivery network that is involved in any one of said media service sessions.

16. The computer-readable medium as recited in Claim 10 wherein said determination to initiate said handoff is made before a need for said handoff is absolutely necessary.

17. The computer-readable medium as recited in Claim 10 wherein said determination to initiate said handoff is made based on a pattern associated with said information.

18. The computer-readable medium as recited in Claim 10 wherein said media service sessions include a streaming technique.

19. A network system comprising:

a plurality of content providers;

a plurality of service providers;

a plurality of client devices, wherein one of said content providers, one of said service providers, and one of said client devices form one of a plurality of media service sessions; and

a service manager for managing handoff of media service sessions among said service providers based on information received, and wherein said service manager uses said information to determine whether to initiate a handoff of any of said media service sessions from a service provider to another service provider.

20. The network system as recited in Claim 19 wherein said information includes information received from said service providers.

21. The network system as recited in Claim 19 wherein said information includes information received from any client device that is involved in any one of said media service sessions.

22. The network system as recited in Claim 19 wherein said information includes information associated with network conditions.

23. The network system as recited in Claim 19 wherein said information includes information associated with any content provider that is involved in any one of said media service sessions.

24. The network system as recited in Claim 19 wherein said information includes information associated with location and priority of service modules that are involved in any one of said media service sessions.

25. The network system as recited in Claim 19 further comprising a content delivery network including said plurality of content providers, wherein said information includes information associated with said content delivery network that is involved in any one of said media service sessions.

26. The network system as recited in Claim 19 wherein said determination to initiate said handoff is made before a need for said handoff is absolutely necessary.

27. The network system as recited in Claim 19 wherein said determination to initiate said handoff is made based on a pattern associated with said information.

28. The network system as recited in Claim 19 wherein said media service sessions include a streaming technique.

29. An apparatus for managing handoff of media service sessions among service providers comprising:

an information receiving module for receiving information;

a handoff determination module for using said information to determine whether to initiate a handoff of any of said media service sessions from a service provider to another service provider.

30. The apparatus as recited in Claim 29 wherein said information includes information received from said service providers and information associated with location and priority of service modules that are involved in any one of said media service sessions.

31. The apparatus as recited in Claim 29 wherein said information includes information received from any client device that is involved in any one of said media service sessions.

32. The apparatus as recited in Claim 29 wherein said information includes information associated with network conditions.

33. The apparatus as recited in Claim 29 wherein said information includes information associated with any content provider that is involved in any one of said media service sessions.

34. The apparatus as recited in Claim 29 wherein said information includes information associated with a content delivery network that is involved in any one of said media service sessions.

35. The apparatus as recited in Claim 29 wherein said determination to initiate said handoff is made before a need for said handoff is absolutely necessary.

36. The apparatus as recited in Claim 29 wherein said determination to initiate said handoff is made based on a pattern associated with said information.

37. The apparatus as recited in Claim 29 wherein said media service sessions include a streaming technique.

38. A method of managing handoff of media service sessions among service providers in a network, said method comprising:

receiving information associated with said media service sessions at a service manager, wherein said media service sessions include a streaming technique.

using said information at said service manager to determine whether to initiate a handoff of any of said media service sessions from a service provider to another service provider; and

if it is determined to initiate said handoff, initiating said handoff.

39. The method as recited in Claim 38 wherein said information includes information received from said service providers, information received from any client device that is involved in any one of said media service sessions, information associated with network conditions, and information associated with any content provider that is involved in any one of said media service sessions.

40. The method as recited in Claim 38 wherein said information includes information associated with a content delivery network that is involved in any one of said media service sessions.

41. The method as recited in Claim 38 wherein said determination to initiate said handoff is made before a need for said handoff is absolutely necessary, and wherein said determination to initiate said handoff is made based on a pattern associated with said information.

42. A computer-readable medium comprising computer-executable instructions stored therein for implementing a method of managing handoff of media service sessions among service providers in a network, said method comprising:

receiving information associated with said media service sessions at a service manager, wherein said media service sessions include a streaming technique;

using said information at said service manager to determine whether to initiate a handoff of any of said media service sessions from a service provider to another service provider; and

if it is determined to initiate said handoff, initiating said handoff.

43. The computer-readable medium as recited in Claim 42 wherein said information includes information received from said service providers, information associated with location and priority of service modules that are involved in any one of said media service sessions, information received from any client device that is involved in any one of said media service sessions, information associated with network conditions, and information associated with any content provider that is involved in any one of said media service sessions.

44. A network system comprising:

a plurality of content providers;

a plurality of service providers;

a plurality of client devices, wherein one of said content providers, one of said service providers, and one of said client devices form one of a plurality of media service sessions, wherein said media service sessions include a streaming technique; and

a service manager for managing handoff of media service sessions among said service providers based on information received, and wherein said service manager uses said information to determine whether to initiate a handoff of any of said media service sessions from a service provider to another service provider.

45. The network system as recited in Claim 44 wherein said information includes information received from said service providers, information associated with location and priority of service modules that are involved in any one of said media service sessions, information received from any client device that is involved in any one of said media service

sessions, information associated with network conditions, and information associated with any content provider that is involved in any one of said media service sessions.

46. The network system as recited in Claim 44 further comprising a content delivery network including said plurality of content providers, wherein said information includes information associated with said content delivery network that is involved in any one of said media service sessions.

47. The network system as recited in Claim 44 wherein said determination to initiate said handoff is made before a need for said handoff is absolutely necessary, and wherein said determination to initiate said handoff is made based on a pattern associated with said information.

48. An apparatus for managing handoff of media service sessions among service providers comprising:

an information receiving module for receiving information;

a handoff determination module for using said information to determine whether to initiate a handoff of any of said media service sessions from a service provider to another service provider, wherein said media service sessions include a streaming technique.

49. The apparatus as recited in Claim 48 wherein said information includes information received from said service providers, information associated with location and priority of service modules that are involved in any one of said media service sessions, information received from any client device that is involved in any one of said media service

sessions, information associated with network conditions, and information associated with any content provider that is involved in any one of said media service sessions.

50. The apparatus as recited in Claim 48 wherein said determination to initiate said handoff is made before a need for said handoff is absolutely necessary, and wherein said determination to initiate said handoff is made based on a pattern associated with said information.

IX. Evidence Appendix

No evidence is herein appended.

X. Related Proceedings Appendix

No related proceedings.